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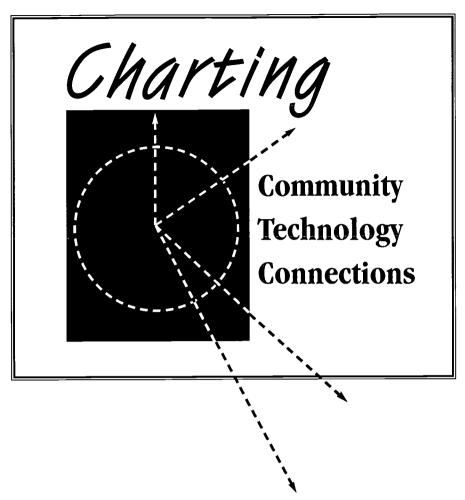
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ABSTRACT

Communities have a wealth of technology resources and history on which to draw in thinking about and using technology in ways that support their values and goals. The technology connections that exist in a community may not be obvious, however. The activities presented in this guide are designed to help identify some of those connections and resources. They begin with the development of a History Wall, in which participants chronicle important developments in their community's history. In the next activity, Mapping Technology Spaces, participants identify the places in the community where technology is already accessible, or where access could be increased. Finally, the Talent Search produces a list of people and organizations that can help with technology issues. The time needed for these activities and style of conducting them, participants needed, and ideal space for conducting the activities are described, and information on note taking, feedback and follow up is provided. Included are feedback and contact information forms. (AEF)





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Introduction

When communities begin thinking about expanding their technology resources, it is often from the perspective of what they lack, how far behind they are, or how unfamiliar they are with the technological landscape. In fact, communities have a wealth of resources and history on which to draw in thinking about and using technology in ways that support rather than undermine their values and goals.

The technology connections that exist in a community may not be obvious, however. The activities in this guide are designed to help identify some of those connections and resources. They begin with the development of a History Wall, in which participants chronicle important developments in their community's history. In the next activity, Mapping Technology Spaces, participants identify the places in the community where technology is already accessible, or where access could be increased. Finally, the Talent Search produces a list of people and organizations that can help with technology issues.

You may want to use this guide in concert with the Access by Design publication, *Technology in Your Community: A Community Conversation Guide*, which can help community members articulate their goals and concerns about technology in the context of the community's values, strengths, and challenges. By using these two guides, you can move ahead in planning for technology in your community with a clearer sense of purpose and of the resources you can draw on in the process.

Background

Charting Community Technology Connections is an adaptation of a model developed by The National 4-H Council, in partnership with the Institute of Cultural Affairs, known as Building Community: Youth & Adults Charting



Assets and Creating Change. The Building Community process and tool kit enable community members to identify and create public knowledge of their community's cultural, historical, human, geographical, and organizational assets. The knowledge is then used to inform and catalyze community and youth development work.¹

In Charting Community Technology Connections (CCTC), community groups look at their history in relation to technology resources and uses in the community. This information can inform efforts to address access to the new digital technologies as well as their acquisition and use in ways that take into account the historical patterns and current realities.

If you use this guide in concert with *Technology in Your Community:*A Community Conversation Guide, the three charting activities described here—History Wall, Mapping Technology Spaces, and Talent Search—can help you to extend and deepen the community conversations. Community members, young people and adults, gather together to share stories, ideas, and information, and may conduct additional investigation and data gathering in between meetings. They produce visual representations, maps, charts, and lists that can be shared beyond the group that creates them to engage increasingly wider circles of people, both from within and outside the community.

This process is especially designed to build partnerships between adults and young people, with young people taking significant leadership roles. If you are not used to engaging young people, you may want to get in touch with local youth development organizations, especially those that, like 4-H Clubs, YouthBuild sites, and National Network for Youth affiliates, have a track record of youth involvement and materials for supporting youth's development as leaders.²



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¹ The Building Community process has been drawn from a variety of sources, including the work of the Institute of Cultural Affairs and the director of its western office, John Oyler, (ICA 4220 North 25th Street, Phoenix, AZ 85016, phone 602-955-4811, email icaphoenix@igc.apc.org); National 4-H Council's Creating Youth-Adult Partnerships curriculum; Kretzman and McKnight's asset mapping (Building Communities from the Inside Out, Evanston, IL. Northwestern University, 1993); and the Institute of Cultural Affairs and National 4-H Council's experience in supporting youth-adult partnerships in the cause of positive social change in over 15 communities. For more information on the Building Community model, contact National 4-H Council (see contact information below).

² For more information about how to involve youth, or to find out about the youth resources in your community, contact The Innovation Center for Community and Youth Development at the National 4-H Council, 7100 Connecticut Avenue, Chevy Chase, MD 20814, phone 301-961-2837, http://www.fourhcouncil.edu/index.htm; the National Network for Youth, 1319 F Street, NW, Suite 401, Washington DC 20004, phone 202-783-7949; or YouthBuild USA, 58 Day Street, 3rd Floor, P.O. Box 440322, West Somerville, MA 02144, phone 617-623-9900.

Logistics

Time and I hese activities can take place in one day or over a period of weeks or even months. How long each activity will take depends on what you're used to, how people in your community do things together and what your goals and priorities are. If you are gathering people from different backgrounds and cultures, pay special attention to the variation between groups. Some groups value storytelling and hearing from everyone even if it takes a long time, while others prefer linear agendas, with goals and desired outcomes organized with time allotments. If creating community dialogue is of primary importance then you may want to spend more time on storytelling. If getting down to action is key, you may want to move more quickly.

> As part of your planning process, you may want to identify the key participant groups in your community, talk to their leaders, and observe their meetings. Start with the organized groups—adult and youth—and then try to identify places where people gather informally so you can see how people talk and relate to one another when there's no formal structure. In some cases, you may need to know someone who's an insider in that group in order to feel comfortable in the informal setting.

You may decide to use a combination of strategies to help everyone be comfortable. When you open the meeting, you can acknowledge the range of styles you plan to use and your reasons for choosing them.

If you are conducting these activities in one day rather than over time, you may want to prepare more in advance. That way, you can fill in additional knowledge about historical events or current geographical considerations that can provide context to the stories participants share. If the process is a longer one, you can collect questions and ideas for further investigation, and then organize teams to gather information from documents, interviews, or observations in between meetings.

We have included broad estimates for how long each segment of an activity might take. The actual time will vary greatly depending on how large the group is, whether you're working in small groups or all together, and how much time you want to allot for reflection and discussion.



Participants

You'll need to recruit a core planning group to help you establish the parameters of some of the activities. This should be a small yet diverse group that can meet once or twice before the larger sessions take place. For the activities themselves, try to involve people and groups of different ages from all across the community who may not have worked together before, including some who may not generally participate in civic affairs. If this turns into a large number of people, you may want to conduct some parts of the activities in small groups, being sure to allow time for them to report back to the whole group.

Space

The ideal space for these activities is one that is welcoming and roomy. Ideally, participants will get up and move around to talk and share their stories, draw images and maps, and post their thoughts on walls and flip charts. You may want to set up tables and chairs in the center of the room with poster paper or sticky paper on the walls. Have on hand lots of markers, pens, note cards, and sticky notes.³ Having simple toys out on the tables can give people something to occupy their hands as they think and reflect.

See if you can conduct these activities in a space where you can leave the materials up for a period of time. This will make it easy to add new information as it arises, and will enable people who don't participate to share in the resulting representations of their community.

Choose space that is easy to get to (or provide transportation) and accessible to people with disabilities. Make sure that the aisles are wide enough for people to move around the room easily, and that each table has space for wheelchairs. Be mindful of how high you hang poster paper and flip charts so that people who are shorter or seated in wheelchairs can easily read and write on the paper. For people who are blind or low-vision, have braille copies of whatever you have posted up on the wall, and if you can, put the braille titles up on the posters themselves; during the meeting have someone at each of the writing or sharing stations who can narrate what is already on the sheets and take dictation to add the new contributions. Have interpreters for people who speak languages other than the one you are conducting the meeting in, including signlanguage interpreters. Make sure everyone can hear, or use microphones.

Refreshments, child care, and other thoughtful ways to make people feel taken care of will help to build a sense of shared purpose and a willingness to commit time and energy to the process.



³ Sticky backed notes and rolls of poster paper seem to be especially useful media for this process, because you can post things rapidly and move them around in different groupings.

Note Taking, Feedback, and Follow-up

For all of the activities, you will need to decide in advance with the planning group:

- How will you document the meeting? Who will take notes if you have small groups? Will you record, videotape, or take photographs? (Be sure to ask if people mind if you do so, or at least inform them that you plan to; decide what you will do if anyone is uncomfortable.)
- How will you communicate with folks afterwards? What do you expect your products will be and how will you disseminate them or information about them, and to whom?

Have a sign-in sheet and ask people to fill out contact information sheets and feedback forms before they leave. Sample forms are at the end of this guide.

History Wall

The charting activities begin with the creation of a visual history of a community, which allows people of all ages and backgrounds to share the same knowledge base. You'll cover an actual wall with paper (sticky paper, flip chart paper, butcher paper), and this will become your timeline.

Depending on the goal of the community group, the history of technology use can be either a complementary or a main focus of the historical activity. Community members discuss the events, people, and activities on a personal level, community level, and societal level that have significantly affected the community. They look at turning points in their history and identify challenges and resources from the past that help them plan for the future. This activity is accompanied by a discussion of the different aspects of technology history in community members' lives. For example, who got the first telephone or television, and what did that mean for the family and the community at large? How did the introduction of the iron frying pan affect the nutrition and eating patterns of the local Indian community and what are the health issues that their descendants now face? When did the changeover from farming to factories as the main industry in town occur, and how did it affect people then and now? What were the main tools and means of communications people in the community used during different time periods?



Advance Preparation

Beforehand, with the planning group, decide:

- What is the overarching question? For example: What are the significant events in the history of our community? or What are the significant events in the use of technology in our community?
- · How far back do you want to go? Do you want to look at events over the last 25 years? 50 years? 100?
- What are the divisions and categories you want to use? Will you focus on your neighborhood or community? Will you include issues across your state, across the country, for society as a whole?
- What materials besides written notes do you want to use? If people want to use pictures, sound recordings, etc., make sure you have the equipment you'll need.
- Will you have "stations" for people to make comments or write down reflections in addition to what they post on the History Wall? What will those stations be?

You can also do some sleuthing prior to the meeting, at the local historical society or museum, for example. Be aware that these "official" documents may tell only part of the story, especially from the perspective of groups that have had less power within the community. Whatever you assemble needs to be presented as just one contribution to the collective process.

Besides the local documents, you may want to obtain information about technology policy and technology access issues,4 especially those that are particularly relevant to your community (telephone customers in rural communities, for example, have often paid higher rates for service than their counterparts in more densely populated areas, although recent legislation is beginning to change this situation).

Timeline

Area of Within the categories and timeframes you decide on, you may want to Focus for gather specific kinds of information in your History Wall. Here are some suggestions to choose from and add to:

- Events in society that had an impact on the community (for example, the Industrial Revolution, the Great Depression, the Spanish American War)
- Significant events within the community (steel mill closes down, water from local river diverted by dam)
- Trends or phases that the community seems to have gone through



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⁴ See the Access by Design Resource Kit for excerpts of publications summarizing the Digital Divide, a law review article on universal access, and information about websites that can keep you up-to-date on the policy and access issues.

- (economic hardship, gentrification, mobilization, coming together)
- Who lived here (newly arrived immigrants from Ireland along with German-Americans who had arrived 50 years earlier, Oneida Nation Indians, African slaves, third-generation Americans who came from the Netherlands and England)
- Main industries (farming, mining, retail businesses, manufacturing, health care, insurance)
- Institutions and organizations in town (Settlement House, Southeast Asian Community Center, public schools, churches and temples—Catholic, Methodist, Baptist, Buddhist)
- Main forms of communication (word of mouth, local newspaper, radio, letter writing)
- Technologies used at home (fireplace, icebox, washing machine)
- Technologies used in primary businesses or industries, with attention to when new tools and technologies were introduced (printing press, manual typewriter, tractor, x-ray machines introduced at local hospital)
- Personal reflections, comments, events ("I went to Washington for the Civil Rights March"; "My mother was in a Japanese internment camp during this period"; "My grandfather landed at Ellis Island and lived in New York City before he came here").

Conducting Set-up and Materials • Put up your timeling vou've chosen (ie. 1)

• Put up your timeline: Across the top of the Wall, put the time periods you've chosen (ie, 1920's, 1930's, 1940's, etc., or 1900-1925, 1925-1950, 1950-1970, etc.), and arrange your categories in a column down the left side of the Wall. Your Wall might look something like this:

1920's

1950's

1980's

2000

our neighborhood the county the state

- Put markers, pens, sticky notes/cards out at each table.
- Cover the wall with your timeline paper.
- Consider whether you want a resource table. This can include materials from participants, artifacts and tools from the community, and written materials about the history of the area or about technology issues.

Warm-up and Introductions

(The amount of time you allot for this activity will depend on the size of the group.)

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As people come in, have some ways for them to introduce themselves to one another if they don't already know each other. This can be a formal warm-up activity ("Find someone who...knows what was there before they built the McDonald's on the corner...can tell you about the latest video games... operates a backhoe"), a gentle suggestion ("Introduce yourself to two people you've never met and tell them something about yourself or what you're looking forward to in this meeting"), or a modeling process, where your core planning team actively introduces people to one another and seeks out those who seem to know fewer people or be less at ease.

When you start the meeting, even if you have a fairly large group, ask everyone to introduce herself or himself, with some relevant identifying characteristic ("I'm a student at Intertown High School and help to moderate an online discussion group about youth development"; "My family has lived in this town for almost 100 years but my kids don't want to stay here when they grow up"; "I'm on the City Planning Commission and I want to hear what folks have to say about technology in this community"; "I don't know much about this town, but I love to listen to stories").

Set the Context

5-15 minutes

Once people have assembled and the formal part of the meeting has begun, introduce the activity and its purpose. You might say something like:

"Most communities have richer and more powerful histories than their residents generally recognize. We want to take the next hour and a half [or whatever time you have allotted] to develop a shared picture of the history and journey of our community. The hope is that we can come to a new appreciation of our common past, see how events and people are connected, and think about the technologies and tools that have been a part of those events. The purpose is to lay the foundation for taking action around the new technologies. This will help to inform us so that we can ensure access to those technologies that we think will serve us well, and organize ourselves so we can be proactive about technology decisions and be involved in any policy matters that might affect our community."

Try to draw in specific examples here from your own community ("There's funding available for starting a community technology center that we could locate right here in the Town Hall"; "Remember how we organized to keep the city from locating the incinerator in this neighborhood? We did that by



getting informed about how the incinerator technology worked—and how it would increase the pollution in what is already one of the most polluted areas in the city").

Brainstorm

20 minutes

Explain how the Wall is set up, with the time running along the top and the categories down the side. Ask for or give an example of something that could go in each category.

Brainstorm events, individually or in small groups. Tell people to write a few words or an image on each card or sticky note that describes a significant event, and to include their best guess of the year that the event happened at the bottom of each card.

As people are finishing, ask them to place their cards on the Wall. (Aim for 40 to 50 cards for a small group of 10 to 20 people, more for a larger group.) When the cards are up, read them aloud to the group and encourage people to ask questions about items they don't know about.

This might be a good opportunity for a short break. Invite people to come up to the Wall, read, and add to it. Encourage them to talk among themselves at their tables and at the Wall.

Discussion about the Technology History

20–45 minutes

At this point you want to encourage people to talk about some of the stories and events from the Wall. Ask people which stories they are curious about and would like to hear more about. Then invite the person who put the story up to share it briefly. Give this part of the process as much time as you can because this storytelling time is what really builds the shared sense of history between people. You'll be amazed at the stories that come out and how interested people become. If you have a big group, make sure there is a microphone so everyone can hear the storyteller.



This is an opportunity for people to share information as well as perspectives and feelings about the role of technology in their community's development. Ask people to look for trends and phases over time, both in the technology development/use itself, and in its relationship to individual and community development.

- Where do the turning points seem to be?
- What are the "chapters" in the story?
- How would you tell the "story" of technology in our community?

Break into small groups to discuss these questions. They are in no particular order, and in fact, you probably want to cycle back and forth. Make it clear that this exercise is not about coming to consensus. Rather, it is to get out on the table the range of ways people think about the technology and its role in the community over time. If it seems appropriate and would expand people's knowledge, share any relevant historical or policy documents that might fill out the stories or raise interesting questions.

Come back to the full group and reflect:

- What are some of the key things that you heard in the stories and discussions?
- What are some of the feelings this activity raises for you about technology in our community?
- What have been the challenges over time that technology has presented or addressed?
- What implications does our history of technology use have for us as we plan our future?

Collect people's responses on a master list.

Extensions

You can organize young people and adults to continue this work in between meetings, collecting artifacts, information, and stories. Hook up with teachers or youth leaders interested in oral history projects, with the local museum or historical society, and with municipal workers involved with city planning and preservation.

If the History Wall is located in a space where you can leave it up, let others in the community know where it is and invite people to come and add to it. If you can't, let folks know how they can contact you so you can incorporate new information.



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Mapping Technology Spaces

Advance This charting activity can help you build a visual representation of the locations in your community where technology access a line in the locations in your community where technology access a line in the locations in your community where technology access a line in the locations in your community where technology access a line in the locations in your community where technology access a line in the location of the locations in your community where technology access a line in the location of the locations in your community where technology access a line in the location of the locations in your community where technology access and knowledge reside as well as the places where further access and knowledge might be developed.

> Your product will be a map representing the physical layout of your community and the places where you might find or create the kind of technology help you've identified as important to your community's development. You should emerge with a better understanding of the social as well as geographic organization of your community that you can build on as you decide how to address technology access.

- Collect maps and a variety of representations of your community showing, for example, the topology, boundaries, products, neighborhoods, school districts, zip codes. You can get maps from the local planning commission, transportation department, the post office, United States Geological Society, or the Internet. You may want to get maps that show the larger area in which the community is located as well because some of your resources may be drawn from your relationships with other nearby places and people.
- Create a blank map that people will be able to write on. Ideally, you'll have a giant version plus letter-size copies for people to fill out individually. Put a couple of points of reference on the blank map just so people know where they are. It can be a fairly crude and quite simplified drawing. Later you can align the handwritten maps with published ones.
- As background, compile some demographic information from the city planning commission, Chamber of Commerce, local university, or central data source such as the Bureau of the Census, about the number of people who live in the community, broken down by neighborhood, ethnicity, income, level of education, and ownership of different kinds of technology. This can help shed light on later questions that might arise in the planning—for example, how to pinpoint areas where people are likely to have less access to technology or where locating technology access centers might have the potential to serve larger rather than smaller numbers of people. Recognize that this kind of information can be sensitive, especially when it comes to income and education level.
- Decide whether you want to arrange people into small groups, mixing people who don't know each other, or whether it will be more comfortable for people to be with folks they already know.



Conducting the Activity

Set-up and Materials

You will need:

- At least one large "map" of your community, with some reference points but otherwise blank, posted on the wall
- Smaller versions of your blank community map
- Your collection of published maps
- Stickers in different shapes and colors
- Sticky notes
- Tape
- Flip charts (graph paper can be helpful)
- Markers and other drawing materials
- Pens/pencils
- Paper, graph paper if desired
- Optional: rulers and protractors, construction paper, string, and scissors, glue and Scotch tape.

Set up the room with tables for small group work or whatever working configuration you've chosen. Put flip charts, other poster materials, and markers around the room. Give each table markers, paper, and whatever other drawing and construction materials you have.

Set the Context

10-15 minutes

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To introduce the session, you might say something like:

"The purpose of this activity is to get a visual map of how technology, places, and people intersect in this community. Where is the technology, in what kind of settings, and what is it being used for? Where do people in this community live, work, play, learn? How do the technology locations overlap with where people do things around here?

"This activity is about social as well as physical boundaries. It can help us to identify places of gathering and networking. Our map will be a representation of the way the community is organized, and we can use it to pinpoint where the resources are—human, financial, and natural—that we can tap for community technology development.

"The technology we're talking about includes the new digital and electronic technologies as well as the traditional machines and tools we have used in this community. When you think about where the access points are now, consider schools, businesses and industry, science museums, arts and cultural organizations, as well as libraries, churches



and temples, or community organizations. [Note: Tailor this list to what's typical in your community.] *Potential* access points might include school buildings when the kids are not in school, municipal offices after work hours, parks and playgrounds, and places where people relax—the local restaurant, bar, or bookstore where we might locate a cyber café or information kiosk.

"These maps can help us see where there are opportunities and resources for technology access and integration, and points of danger or concern. They can also help to ensure that we include everyone and all parts of the community in our discussions about technology."

"First impressions"

5 minutes for brainstorming, 10-20 minutes for sharing

Have people take five minutes to make a list that answers the question:

"If you were making a map of the community to help a stranger understand who we are, what places would be most important to include?"

Emphasize that the list doesn't need to include anything about technology—although it can if they want—but should be about the aspects of the community space or environment that have meaning to them.

If your group is not too large, ask people to share their lists and talk about their choices. Or break up into small groups to talk and compare notes, then have a short summary session. If time allows, have people write their lists on sticky notes, one place per note, and put them up on a wall or white board. Then the group can see if the places fall into categories (see "Conducting the Conversation" in *Technology in Your Community* for a more in-depth description of this process).

"Places and Spaces in our Community"

30–45 minutes

Working in small groups, or all together if the meeting is small, ask people to use their lists to construct a map of the areas of the community on flip charts or large paper on the table or wall. They also may want to refer to your collection of published maps. Make it clear that the map can include official and informal boundaries, neighborhoods, and places. Ask people to locate and label the following things, if they aren't already on people's lists:



- Neighborhoods
- Landmarks, sacred spaces, important places in the community
- Roads and pathways
- Boundaries
- Open spaces
- Schools and afterschool programs
- Colleges, vocational and trade schools
- Community organizations, youth organizations
- Parks, playgrounds, recreational spaces
- Churches and temples
- · Art and science museums, theaters and concert halls
- Businesses, small and large, including of course where people eat, drink, and make merry
- Anything else that the group sees as part of the physical makeup of the community.

If you are working in small groups, take a few minutes at the end of this activity to transfer the information from all the maps to your large map and review it together. Are there any surprises? Anything missing?

"Where's the technology?"

20-30 minutes

Ask participants to look at the large map and identify places where people in the community have access to technology and/or opportunities to learn about it. Have them put a sticker on each of these locations on the map (be sure to use the same color for all of them). On a flip chart or white board, write the name of each place, the technology there, what kind of access it offers and for whom, and what it costs community members to use.

Examples might include the local high school, where students take classes in using computers and have access to computers and the Internet during the school day; a copy shop that rents time on its computers by the hour; a community access television station that makes its video and editing equipment available to groups developing programming and teaches people how to use it. Does the public library offer access and training? How about the local Urban League?

Next ask people to identify places in the community where there is currently no technology access but where there could be and places where there is access that could be increased or enhanced. For instance, it might be possible for the high school to allow community access to its computer lab during non-



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school hours, or the electronics shop might be persuaded to hold free or low-cost training sessions as a community service. Mark these places on the map with stickers (choose a new color), and write the place and information about potential technology access on a flip chart.

Discussion and Analysis

20-40 minutes

Ask the group to look at the actual and potential places of access and consider:

- Starting with overall impressions, what one or two things seem to jump out?
- What does the picture tell you about existing resources?
- Are there places where there seems to be little, or a lot, available?
- What about potential resources?
- Of the places that do provide access, are any of them limited by location, cost, or schedule?
- What are the opportunities for increasing access? Are there places close to where people naturally gather that might offer better access?
- How can we be sure to include everyone and not violate the sacred spaces, landmarks, and boundaries in our community?
- What technologies do we want more of in our community spaces, and what might we want to limit?
- Where would be the best places to put these technologies?

Extensions

This activity can be extended if people are interested in building a more comprehensive map of the community and its current and potential technology resources. You might assemble a team of people to interview community members and walk through the community to identify places that didn't come up in the meeting, and add what they find to the map.⁵

You also might extend this activity to cover the history of technology in your community—were there factories that are now defunct? Where was the first Automatic Teller Machine (ATM)?



ACCESS by DESIGN

⁵ For more information and ideas on "asset-mapping" and youth-adult partnerships for conducting research, contact:

The Innovation Center for Community and Youth Development of the National 4-H Council, 7100 Connecticut Avenue, Chevy Chase, MD, 301-961-2800, info@fourhcouncil.edu, http://www.fourhcouncil.edu;

The Center for Youth Development of the Academy for Educational Development, 1825 Connecticut Avenue, NW, Washington, DC 20009, 202-884-8000, http://www.aed.org/us/youth.html.

Talent Search

Conducting $T_{\text{his activity will help you capture the strengths, talents, gifts, and}$ the Activity contributions that you can tap from individuals as well as organization contributions that you can tap from individuals as well as organizations. Your product will be an informal inventory of skills, resources, and experiences that you can draw on and refine as you proceed with your planning.

Set-up and Materials

You will need:

- Sticky notes—larger ones if possible, in two different colors, one for people, and one for technology
- Tape
- Flip charts
- Markers and other drawing materials
- Pens/pencils
- Paper.

Set up the room with tables for small group work or whatever working configuration you've chosen. Put flip charts and other poster materials around the room with markers. Put markers, paper, and sticky notes on each table.

Set the Context

5 minutes

Introduce the activity by saying something like:

"The purpose of this is to catalogue the people and groups that know something about technology and might be able to help us in some way with our technology issues, decisions, and capacity in this community. We often overlook valuable resources because they're not in the obvious places. So our exercise today is to identify both the obvious and the unrecognized talents among us and in our community. Don't limit yourself to thinking about people who are adults or have degrees. Think of your neighbors and your children, what they know, do, and are good at."



List the Areas Where You Need Help

10-20 minutes

Based on your community conversation and planning process to date, decide what the main areas are where you need resources and talent. Ask the group to complete the phrase, "We need...." For example:

- To learn about what the technology is, what it's good for
- Knowledge, training, information about how technology can be used in/can support
 - our children's education—teaching and learning in school
 - · afterschool programs
 - job training
 - community development
 - better communication
 - participation in the civic process
- Infrastructure: help with getting the equipment and getting connected to the Internet
- Help finding money for hardware, software, meetings, trainings, maintenance, etc.
- Information about policy and what we can do about it
- Assistance in setting up a community technology center or other access point.

List People and Organizations

20-30 minutes

Ask people to jot down on sticky notes people, organizations, or places (one per sticky) that might have something to contribute to building technology knowledge, capacity, or infrastructure in your community. Encourage them to think across age groups and cultures; about people in trades and academe; about non-profit, business, government, and funding institutions; and about folks who are reflecting about technology as well as using it (they can do this in groups or individually).

In addition to the obvious choices—the computer teacher at the local high school, salespeople at an electronics store, the person who provides technology support for the bank—be sure also to look for the less obvious possibilities: the high school student who has created her own webpage at school, the artist who is experimenting with computer design, the office worker who taught colleagues how to use the new word processor because there was no one else around who understood it.



Other possibilities might include:

- The business that just got new equipment and a) has used equipment to get rid of or b) is conducting training for its workers on the new equipment
- The young people who are making music videos with their band
- The auto mechanic who has figured out when the computer diagnostics are useful and when his own hands-on analysis tells him something that the computer doesn't.

Some people or groups might make it onto your list not because of their involvement with technology, but because their work could provide you with useful information about the community and its needs. These might include the community medicine division of the local hospital that is collecting data and building a database about asthma rates and pollution in different parts of the city, or the United Way that is doing a community needs assessment.

Ask people to send up their three most unique ideas. Put them up on a nearby wall or on a flip chart.

Ask people if they see similarities among the people and groups they've named—do they fall into any categories? Ask people to name the categories, and then organize the stickies into these groups. If people have more stickies, continue to collect them and put them up, adding them to your existing categories or creating new categories as needed.

Match People with Needs

10-20 minutes

Ask the group to compare the list of needs you constructed with the list of people and groups with knowledge and expertise. Are there any obvious connections? Are there any individuals or organizations that you want to get involved in the planning process right away? Others that might be helpful in the future?



Extensions

While you may not want to approach all of these people right away, this list can serve as an ongoing catalogue of potential help and support. You may want to add to it as you learn more and refer to it often as you plan your community's approach to technology.

Next Steps

Take a few minutes to review and reflect on the work of these three activities, especially in the context of any ongoing discussion or planning the community may be engaged in. Ask the group what they feel would be appropriate next steps.

Ask the group to list possible action steps, prioritize the list, call for volunteers, and organize working groups.

Whatever you decide to do next, you've begun to establish a foundation of rich information and insight, new perspectives on your community, and ways to think critically about technology and its place in your world.



CHARTING COMMUNITY TECHNOLOGY CONNECTIONS

FEEDBACK FORM

Date of Meeting	
Name of activity	History WallMapping Technology SpacesTalent Search
The activity	worked welldidn't work well—it would have been better if:
The most useful par	t of the meeting was:
The least useful part	of the meeting was:
I wish we had talke	d more about:
I wish we had talke	d less about:
The next steps we h	ave plannedare appropriateit would be better if:



CHARTING COMMUNITY TECHNOLOGY CONNECTIONS

CONTACT INFORMATION

Date of meeting
Name
Address
Phone number(s)
Email address
Please share my contact information with other meeting participants.
Please DO NOT share my contact information with other meeting participants.



About Access by Design

 $m I_n$ 1996, Education Development Center, Inc./Center for Children and Technology, the American Association for the Advancement of Science, and Campbell-Kibler Associates, Inc., began a research and action project about the equity issues in technology. We conducted interviews with community leaders and organizations in more than 50 places across the country, in small and large cities, in rural areas and Indian reservations, with people from a range of ethnic, language, class, and racial groups. We spoke with people with disabilities and disability rights advocates, representatives from industry, community leaders and activists, youth workers and educators, funders and policymakers. We worked closely with a number of community-based and national organizations to examine the issues related to technology access, including how technology is designed and how well—or poorly—it serves diverse communities. Our partners included the Progressive Baptist Church in New Orleans, the Rhode Island Indian Council, El Puente in Williamsburg, Brooklyn, the Oyotunji African Village in South Carolina, the Accommodation Resource Center at the University of Nebraska-Lincoln, the Young Scientists Club in East Harlem, New York, the Collaborative Visualization (Co-Vis) project of Northwestern University and their afterschool career program at the Kelly High School in Chicago, and the Innovation Center for Community and Youth Development of the National 4-H Council.

The work began much earlier, however, among educators and activists in a variety of settings, including the Center for Children and Technology (CCT), established in 1980 at Bank Street College of Education and now part of Education Development Center. In pursuing how the new computer technologies could best support teaching and learning, researchers at CCT became aware of inequities in access and decisions about design that favored some groups over others, noticing first the gender issues and subsequently race and disability concerns. Yet even by 1996, relatively little attention and few resources were being dedicated to these concerns.

Access by Design was an attempt to gather together educators, activists, policymakers, and industry representatives to build awareness and action for increased equity and diversity in technology.

The products from this effort include materials for community leaders and organizations, as well as a report and action agenda based on the interviews, meetings, and policy efforts conducted from 1996 through the beginning of 2000.

About National 4-H Council

National 4-H Council is an uncommon youth development organization fostering innovation and shared learning for youth workers and young leaders. National 4-H Council partners with the Cooperative Extension System, communities, and other organizations to provide technical support and training, develop curricula, create model programs and promote positive youth development to fulfill its mission. National 4-H Council also manages the National 4-H Conference Center, a full-service conference facility, and the National Supply Service, the USDA nationally authorized agent for the interstate sales of paraphernalia bearing the 4-H name and emblem. The 4-H name and emblem is protected under 18 U.S.C. 707. National 4-H Council is a nonprofit 501 (C)(3) organization.





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